

General Specifications

- Aeronautic quality precision Cr-Moly tube manufactured by par Osborn Metals.
- Seamless cold drawn condition C, N, A or HT
- Good bending capabilities (acc. to condition), good welding ability
- Excellent mechanical characteristics
- Steel suitable for nitriding when very good resistance to wear and abrasion is needed.

Material Spec & Norms

- 4130 - 30CrMo4 aeronautic quality acc. to AMS-T 6736, AMS6360, AMS6361, AMS6362, AMS 6371
- Cleanliness AMS2301
- Grain size ≥ 5 acc. to ASTM E112
- Chemical composition WL W.-Nr. ~ 1.7220
- Tolerances acc. to AMS2253 (or better on demand)

Applications

- This grade has been used for years in the aero industry
- This tubes are often used in motorsport, cycling and soft mobilities.
- Examples of use cases :
 - Roll cages
 - Anti-roll bars
 - Cargo bike frames
 - Transmission shaft
 - Struts

Mechanical Characteristics

- 4130 +C : Hardness ≤ 25 HRC
- 4130 +A : Hardness =99 HRB
- 4130 N (+SR/+N) : Hardness =269-331 HB
Rm ≥ 655 MPa Rp0,2% ≥ 517 MPa A% $\geq 12\%$
- 4130 HT-125 : Hardness 23 HRC
Rm ≥ 862 MPa Rp0,2% ≥ 690 MPa A% $\geq 12\%$
- 4130 HT-150 : Hardness ≥ 31 HRC
Rm ≥ 1034 MPa Rp0,2% ≥ 931 MPa A% $\geq 10\%$
- 4130 HT-180 : Hardness =363-415
Rm ≥ 1241 MPa Rp0,2% ≥ 1138 MPa A% $\geq 8\%$

	C	Si	Mn	S	P	Cr	Ni	Mo	Cu
Min	0,28	0,20	0,40	$\leq 0,025$	$\leq 0,025$	0,80	$\leq 0,25$	0,15	$\leq 0,35$
Max	0,33	0,35	0,60			1,10		0,25	

Specificities

- 100 % Defect inspection by Eddy current testing
- Tubes are marked on the O/D as :
4130-30x2-PV A21/155
- Tubes are delivered descaled, phosphatized and oiled
- Guaranteed full traceability

Options

- 4130 tubes are delivered in condition N (cold drawn +SR or +N). On demand, Osborn Metals can manufacture all other conditions : +C,+A, HT-150 or HT-180
- Linished & oiled